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EMPOWERING ENTREPRENEURSHIP THROUGH FORESIGHT AND INNOVATION: DEVELOPING A THEORETICAL FRAMEWORK FOR EMPOWERMENT IN ENTERPRISE PROGRAMS

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This study explores how education and development in the skills and knowledge of foresight, innovation and enterprise (FI and E) relate to the empowerment of young individuals with respect to creating a new venture. In 2003, three groups of young persons aged between 13 and 18 years participated in a program designed for empowerment. An evaluation was conducted nine months later that provided useful insight into the impact of the education design, content and delivery. This research provides deeper insight into the way FI and E education can be used to create empowerment through the derivation of a framework that addresses entry, process and agency factors.

Keywords: Empowerment; foresight; innovation; enterprise; entrepreneurship; youth program.

1. Introduction

The Questacon "Smart Moves Invention Convention" (QSIC) has become an annual event organized by Smart Moves, the outreach team of Questacon, The National Science and Technology Centre, in Canberra, Australia. It is a five-day program designed to provide rural Australian youth aged from 13 to 18 years the opportunity to share ideas about science and technology and to gain skills in new enterprise development. The initial program, called the "Invention Convention," was conceived through a partnership between the Australian Graduate School of Entrepreneurship (AGSE), the Australian Foresight Institute (AFI), and Questacon Smart Moves (QSM). In light of the results from a qualitative post-evaluation, the contributing partners from AGSE and AFI, who were the primary designers and facilitators, have combined in this paper to reflect on the program's design and efficacy in achieving its "empowerment" aim.

The QSIC incorporated an experiential learning process in the conception and design of an enterprise. Honig (2001) found that entrepreneurs tend to use flexible and adaptive learning strategies, while Cope and Watts (2000) and Politis (2005) emphasized the importance of "learning by doing" for entrepreneurs. The process and value of experiential learning has also been well, established by Kolb (1984). In 2003, the inaugural QSIC was designed and delivered to fifteen selected participants. During the five-day program, they were challenged to develop scenarios of probable and preferred futures, develop innovations within these contexts and translate these innovations into enterprise concepts. These concepts were then presented to invited mentors, known for their innovation and experience in establishing new ventures. The group learning process was complemented by personal journaling during allotted free time. Expressing our own position, that entrepreneurship should aim to create new value for society along multiple dimensions, the program emphasized reflecting on how "value" is situated within diverse value systems, and on how innovation processes help to create value and/or address problems within complex social contexts. Ramos and O'Connor (2003) found that the inclusion of foresight processes into a program had the effect of creating ventures with broader contextual social views while being aimed at achieving added economic value and/or sustainability.

This study explores the role of foresight, innovation and enterprise (FI and E) education and its relationship to empowerment using the case of the pilot QSIC in September/October 2003. The study is divided into three sections. First, we review the literature to draw together perspectives on empowerment through the fields of foresight, innovation, entrepreneurship and enterprise programs. Second, informed by a post-evaluation of the QSIC program, we explore the tacit and explicit assumptions about empowerment by using a first person action research approach that reveals unanticipated consequences, barriers and misconceptions. The third section highlights findings and proposes a more considered framework for developing empowerment through FI and E, before concluding and suggesting future research directions.

2. Perspectives on Empowerment

2.1. *Empowerment and foresight*

Gidley (2004) has conducted extensive research on the link between futures research/studies and youth empowerment and shows strong connections between foresight and youth empowerment. Most crucially, she emphasizes how futures studies and visioning processes for youth need to be linked with opportunities for action. Gidley (2001) has also cited evidence that suggests facilitating positive images of the future for youth is effective in dealing with depression and even in lowering the incidence of suicide among youth. Further, she shows that previous research has linked hopelessness with "the inability to *control* outcomes, whether good or bad" (Gidley, 2001; emphasis added). In other words, helplessness or a lack of agency is associated with issues of hopelessness (Abramson, Metalsky and Alloy, 1989). Agency then may be considered a primary outcome of empowerment.

Hicks (2002) showed that learning about global futures triggered a distinct psychological process in a student and the five stages of the psychological process were: *cognitive,*

affective, existential, *empowered* and *action*. In the first stage, he claimed that students intellectualized the dimensions of global futures, which included learning about concepts and ideas, such as globalization, global issues and challenges. As the student progressed, frustration ensued with the complexity of the issues, and sadness, worry and anxiety followed over the state of the world and their dystopic implications, which were constituted in the affective stage. This often led to re-assessment of the students' own place in the world and challenged their assumptions about their own lives. This existential stage was a potential turning point where students began to integrate their concerns about global futures into their lives. The empowerment stage was where students found sources of inspiration, innovation and renewal that gave them a sense of hope, motivation and direction. In the last stage, action, students were *socially empowered* to find new relationships, networks, practices, behaviors and projects that addressed their concerns about global futures. The empowerment and action stages, where the *condition* for positive action is created, make implicit links to innovation and entrepreneurship. However, this is often where the work in foresight ends and perhaps this suggests a form of *social empowerment* or agency may be one prerequisite to entrepreneurship.

If students can be socially empowered through developing foresight capacity, it is necessary to consider the implications for the broader social setting. Laveman (2000) identified a macrosystemic approach to empowering adolescents and considered empowerment as a nested system, whereby the individual is but one system complete in and of itself while being contained within larger systems and structures. For example, adolescents are nested within family, school and community systems, each impacting upon the individual. Laveman (2000) identified eight so-called life domains: residential, family, social, educational, vocational, medical, psychological and legal, all of which affect the empowerment of adolescents. This concept has substantial implications when one considers the breadth and depth of influence that may be required in the task of achieving empowerment for individuals.

It would seem that little substantive work from the foresight perspective has been done to examine the link between FI and E, in particular with respect to the empowerment of youth. Despite this, it can be said that effecting agency is not only considered an integral aspect of empowerment from a futures research/studies perspective, but appears to blaze a trail toward activities encompassing innovation and entrepreneurship.

2.2. *Empowerment and innovation*

The coincidence of the concepts of empowerment and innovation are largely found in organizational management theory, where empowerment is examined as a process through the context of innovation within an organizational environment (Dooley and Sullivan, 2001; Sundbo, 1999). Sustaining corporate entrepreneurship also relies on internal organizational factors such as work discretion and autonomy (Kuratko, Hornsby and Goldsby, 2004). The organization is responsible for inducing innovation through human resource management practices, development of competencies in employees and organizational development. Empowerment is utilized as a decentralizing agent for innovation within the context of the organization (Kanter, 1984; Roffe, 1999). Morgan (1997) also highlights the self-reinforcing

nature of empowerment whereby the experience of success becomes a transforming and energizing force that encourages further progress and success.

Empowerment within these contexts might be termed *organizational empowerment*. However, Lincoln, Travers, Ackers and Wilkinson (2002) claim that the term empowerment in the organizational context is surrounded by a tangled web of meanings and consequently, is laden with misunderstanding and tension. Seibert, Silver and Randolph (2004) address some of this confusion. They distinguish differences between an empowerment climate in the organizational setting and the psychological empowerment of individuals. Empowerment, when viewed through the innovation lens, seems to converge on distinctions between the level of individuals and their social setting and, more particularly, the organizational context.

2.3. *Empowerment and entrepreneurship*

Empowerment in the field of entrepreneurship is most commonly featured in literature on minority or disadvantaged groups. For instance, Kantor (2002) highlights that empowerment should be included as a measure when assessing the success of women in South Asian micro-enterprise. Kantor (2002) argues that mere economic indicators are insufficient if the aim of an intervention is to both improve the economic position and the control of the proceeds of micro-enterprise. This suggests that the goal of enterprise programs, in some instances at least, have greater ambitions than just stimulating economic activity, and holds concerns with equality, rights, power and domination. Kantor (2002) further suggests that "[I]t is important to stress that empowerment outcomes are not only relevant within developing nations where gender and other forms of inequalities are often patent. Economic inequality and constraints on opportunities for marginalized groups also are common in developed nations." For instance, Osborne, Falcone and Nagendra (2000) offer a case study of an entrepreneurship intervention for the unemployed in the USA, while Martin and Wright (2005) have explored the role of information and communication technologies to empower female entrepreneurs in the UK. This form of empowerment focuses on the individuals' abilities to control their own destiny and, for our purposes, may be referred to as *self-enabled empowerment*.

While Kantor's (2002) view is one of outcomes, Krueger and Brazeal (1994) called for educators, consultants and policy advisers to help empower potential entrepreneurs to seize opportunities presented in their environment. They presented the case for building empowerment as an enabling *process*. Indeed, Kantor (2002) summarized this position through the eyes of the two authors Kabeer and Kishor (cited in Kantor, 2002). The former focused on the end-product of empowerment that is found in evidence that suggests increased control, choice and decision-making, while the latter drew our attention to the enabling processes, which included education and income or assets that increased control and choice. An example of empowering processes is found in Le Breton-Miller, Miller and Steier (2004), who reviewed the succession literature for family-owned businesses. They reported that the transfer of stock to a new incumbent "should start immediately after succession in order to *empower* the new leader" (emphasis added). Here, the process of providing a sufficient equity holding to the successor is considered at least partly responsible for leading to empowerment.

Another example is offered through the provision of micro-credit (Johnson, 1998), where people are empowered by gaining access to credit otherwise unavailable to them at market rates. Empowerment then can be viewed from at least two perspectives: one of process and the other of outcome.

2.4. *Empowerment in enterprise programs*

Enterprise and entrepreneurship are two closely related concepts (Cromie, 2000). However, Atherton (2004) portrays a useful distinction when he claims that "enterprise incorporates entrepreneurship as a state (being an entrepreneur) and a behavior (being entrepreneurial) as well as the wider enabling and disabling conditions and structures." This implies that enterprise programs have broad responsibilities that include not only encouraging individuals to be entrepreneurs, in the sense of owning a business, but also developing a set of dynamic "entrepreneurial" behaviors, such as those described by Athayde (2003) — leadership, creativity, intuitiveness, personal control and high achievement. In addition, it suggests that an enterprise program should be congruent with the wider set of environmental conditions and structures.

Entrepreneurship education has been reported to have had a positive influence on entrepreneurial tendency (Henderson and Robertson, 1999; Lüthje and Franke, 2002; Rasheed, 2002; Sexton and Bowman, 1983). However, the tendency or inclination toward entrepreneurship appears to have coupled or multiple links between education and individual personality characteristics (Lüthje and Franke, 2002), cognitive infrastructure (Krueger, 2000; Mitchell *et al*., 2002ab) as well as social context and cultural values (Mitchell *et al*., 2002ab). Further, .Wang, Wong and Lu (1999) found support for a complex three stage model that took into account key demographic, educational, motivational attitude and perceived interest and feasibility factors.

Hansemark (1998) indicated positive increases in "need for achievement" and "internal locus of control" from a study of a 36-week entrepreneurship program. Later, Peterman (2000) conducted an Australian study to find a positive increase in secondary school students' attitudes toward desirability and feasibility for starting a business. However, Peterman and Kennedy (2003) drew attention to the wide variety of entrepreneurship programs on offer in the market place and suggested that, while positive results may be found from one study, they could not suggest that all programs would have the same result due to variations in content, pedagogy and learning styles. This observation is consistent with Falkäng and Alberti (2000), who claimed that there was little uniformity in content and approach among courses, and that entrepreneurship education research needed further development, a view echoed by Greene, Katz and Johannisson (2004).

During the extant literature review, little has been discovered relating specifically to youth empowerment through the context of foresight, innovation and enterprise programs. The National Foundation for Teaching Entrepreneurship (NFTE) does however conduct useful evaluation of their programs through an association with the Harvard University Graduate School of Education. Findings from a 2002–2003 study showed an increase in the internal locus of control experienced by the participants in the NFTE program when

compared to a control group sample (Nakkula *et al.*, 2004). However, the Executive Summary report only speculates on the reason for this difference and reveals nothing about the process and content that may deliver this positive change. Overall, we have found an absence of research in this area and moreover, we have provided evidence of a potential synergy between foresight, innovation and entrepreneurship that could lead to dynamic outcomes.

The results of an evaluation of the 2003 QSIC conducted independently by Questacon Smart Moves presented an opportunity for an examination of the issues incorporated in bringing empowerment to rural youth in a developed country. More specifically, it provided the authors of this paper the occasion to reflect on their educational practice and bring to account the issues that were incorporated in both the successes and deficiencies of the program with respect to empowerment. At least in part, this case study addresses the call by Harrison and Leitch (2005) for further research on the relationship between content and process in entrepreneurship education.

3. Methodology

Our research design incorporated theory-building as an inductive process (Mintzberg, 1979; Eisenhardt, 1989), working from the data to produce a theoretical empowerment framework. However, Strauss and Corbin (1998) highlight that, while a "grounded" theory incorporates an inductive step, it is then complemented by interpretation informed by a researcher's life experiences and accumulated knowledge base. They argue that this complementary step is a deductive process and therefore, the process of building theory interplays between the data and the researcher using inductive and deductive practices.

In accordance with this view, our research endeavor is located in the interpretive tradition. We embarked upon primarily an inductive process of extensive reflexive engagement between the data and ourselves. It addresses a social structural theory and is not an attempt at empirical generalization. Stake (2003) argues that case study-based research is a contextualizing process, which situates a "bounded" object of study within historical, cultural, physical, social, economic, political, ethical and aesthetic dimensions. Yin (1994) makes the point that particular cases can be used to generalize to theory but should not be mistakenly used to generalize to other cases. Yin further notes that a single case can represent a significant contribution to knowledge and theory-building when it tests what is considered to be well-formulated theory.

The method involved engaging with the data in two stages of analysis utilizing two different techniques. First, drawing on the collected third party evaluation comments, content analysis was used to document, in objective and quantitative terms, whether the unsystematic observation of empowerment was clearly evidential (Neuman, 1994). The participant comments from the post-evaluation were systematically themed and coded against the concepts of empowerment that were articulated in the aims of the QSIC. This first level of analysis revealed gaps in our perception of empowerment and unexplained outcomes with respect to our stated design aims.

The second stage of analysis applied a first person action research (Torbert, 2001; Reason and Bradbury, 2002) technique to address these deficits and deficiencies and to better understand the effects of the QSIC's design and to learn from our experiences of developing the QSIC process and content. Senge and Scharmer (2001) state that reflecting on past experiences is one mode of learning, and that "all learning cycles are variations of this type of [reflective] learning."

4. The Questacon Invention Convention Empowerment Design

The Questacon Smart Moves charter for the youth program was meant to assist those aged from 13 to 18 years from rural communities by providing them an opportunity to combine and share experiences and ideas about science and technology and to gain practical skills in developing new business enterprise initiatives. Participant selection for the program was based upon an application that outlined an "inventive" idea and demonstration of a strong desire to pursue the development of the invention. The primary program purposes were to decrease the impediment of isolation perceived by rural communities and provide access to skills and services as well as connectivity and empowerment.

The AGSE and AFI collaborative development proposal offered to combine the expertise in entrepreneurship and innovation education developed by the AGSE and AFI with Questacon's access and experience with the rural youth communities in a five day workshop-style "Convention" held during the September school term break of 2003. The preliminary discussion between the parties (AGSE, AFI and QSM) resolved that the QSIC held an overriding aim to provide a select group of young Australian entrepreneurs with a support network of peers and mentors and new ways of thinking that would enable them to develop progressive ideas commercially. The educational design was to place an emphasis on empowerment and it was agreed that empowerment in the educational sense would mean the participants' increased ability to:

- *Differentiate ideas from opportunities*: Aid participants in the ability to move across many ideas more fluidly, in a grander context of opportunity thinking;
- *Understand that which creates and sustains value*: Increase contextual and creative thinking through a deeper understanding of what is value for people and for society in general;
- *Operate within a team*: Give the participants experience in teamwork, which facilitates interpersonal development and social empowerment;
- *Package concepts and present opportunities*: Increase the ability of participants to effectively communicate their ideas through presentation and communication skills;
- *Integrate the fundamentals of marketing, finance, and legal requirements for a start up business*: Develop their capacity to run a start up business through practical business skills and knowledge.

Both *content* and *process* were used as organizing concepts. We felt strongly that it would have been inauthentic to present FI and E as a "pedestrian" activity and we attempted to simulate the profound challenges faced by innovators and entrepreneurs in bringing new value into the world. The educational design intended to enhance aspects of skills and

knowledge through the provision of content on the tools and useful analytical frameworks, while the processes were intended to inspire positive attitudes toward foresight, innovation and enterprise. The breadth and depth of the content amounted to a crash course on FI and E that would profoundly expand the cognitive horizons of participants. The process of the QSIC was an experiential action learning "baptism by fire" approach that resembled an FI and E boot camp intended to challenge them to rise to the occasion of developing ventures in complex social contexts. The thinking was partly inspired by a youth program operated by the international organization *Outward Bound* that challenges participants in wilderness adventures using outdoor activities as tools designed "to help people discover and develop their potential to care for themselves, others and the world around them through challenging experiences in unfamiliar settings" (Outward Bound Australia, 2002). The content and processes delivered in the five days have been summarized in Figure 1.

Following the program's design principles, we integrated complex content from higher education into experiential learning processes deliberately aimed at students of a higher level of maturity and academic skill than that of the participant age range. The participants were encouraged to respond and were supported throughout the five days by their peer groups, mentors and facilitators to achieve something beyond what they would have normally encountered in a school environment. By the end of the five days, the noticeable maturity of the participants in developing and delivering complex venture designs seemed

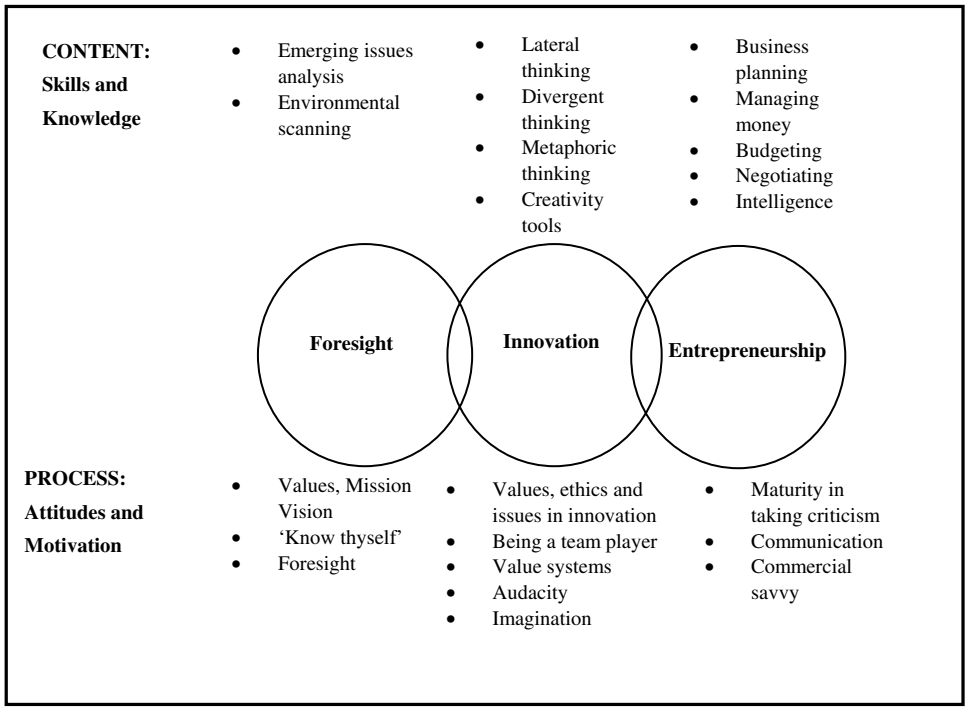

Fig. 1. Dimensions of foresight, innovation and entrepreneurship education for empowerment.

to vindicate our efforts, and anecdotal comments from the participants suggested high levels of satisfaction with their achievements.

5. Analysis of the Third Party Report

Upon leaving the QSIC, the young people returned to their normal home and school lives armed with new skills that were intended to empower them to pursue their individual new venture projects. Nine months later, an independent third party conducted an evaluation to assess the sustained success of the QSIC intervention and to make recommendations for the 2004 QSIC. The third party evaluators gathered qualitative data via telephone interviews with as many participants as were available (ten of the fifteen). Each delegate contacted was asked a series of probing questions relating to aspects of the conference. The comments that were considered related to empowerment were drawn from the areas of questioning provided in Appendix A.

The results of this evaluation were shared with the authors by QSM. The extensive comments seemed to provide a useful insight into the impact of the education design, content and delivery on the stated aim of empowering these young individuals, and it offered a rich source for analysis and reflection on the concept of empowerment within this type of enterprise education intervention. QSM agreed and granted permission to the authors to conduct further analysis.

To confirm our casual observations, we first applied content analysis to the qualitative data in the report. The comments were systematically themed against the five stated empowerment aims of the education component of the 2003 QSIC and each were allocated as either a positive or a negative reflection of our aims. In this process, we discovered some comments that seemed focused on empowerment but were not attributable to any of the empowerment aims of the educational component of the program. These were simply listed as unallocated comments and as either positive or negative.

Table 1 summarizes the results of the content analysis. It was clear that many more comments surfaced on the positive side of the ledger for all areas except the unallocated comments. While this was comforting from an evaluation perspective, it also prompted further exploration of the negative and unallocated comments for breakdowns in our conception of empowerment and causes of any failure to deliver empowerment to the participants.

Table 1. Summary of content analysis.

	No. of Positive Comments	No. of Negative Comments
Differentiate ideas from opportunities	12	4
Understand that which creates and sustains value	3	0
Operate within a team	3	1
Package concepts and present opportunities	3	1
Integrate the fundamentals of marketing, finance and legal requirements for a start-up business	8	4
Unallocated comments	3	5

6. Analysis by First Person Reflection

The subsequent discussion of the content analysis identified that the positive unallocated comments, while not being formal and articulated aims, were certainly intended outcomes. This forced the view that perhaps there were more tacit and unexpressed aims at work in the preparation and delivery of the program than was immediately obvious. It was then decided that a second level of analysis should be conducted utilizing an action learning, first person reflective method of recalling or recounting past actions through the lens of an inquiry framework. Imposing a two-way relationship between the data and the inquirer through an inquiry framework is also referred to as reflexive practice (Alvesson and Sköldberg, 2000). To facilitate this process, four questions were established (refer to Appendix B) to which the two researchers independently responded in writing before combining again to analyze the responses further.

The reflexive work was then combined with a review of the original design, process flow and content of the QSIC to assemble an explicit perspective on the development and delivered QSIC format. Following rigorous discussion, a more complete expression of the program's aims was then condensed into four main points, namely: Values, Process, Content and Support. A summary of the outcome is provided following the questions listed in Appendix B. The original approach to the design was emergent and adaptive as the two designers and developers of the program grew in awareness of the fields of expertise offered by the other and the requirements and expectations of QSM were fully absorbed. Figure 2 shows the results of the reflexive analysis that reveal the tacit and explicit influences of empowerment built into the QSIC 2003.

To progress the exploration, the unallocated and negative comments from the content analysis were coded with an empowerment concept in an attempt to identify its source. The analysis identified seven concepts that were unaccounted for in the education empowerment aims. On the positive side, *Confidence* and *Inspiration* were associated with factors of an empowering belief that an individual could make things happen. On the negative side, factors such as: *School* being too time consuming and demanding; an inability to grasp the *Practical Application* of that which was provided; *Parental Demands* and lack of agreement and permission prevented action on projects; the *Advanced Materials* delivered in the QSIC were suggested to be discouraging; and a *Preference to Ones' Own Ideas* rather than group process were each identified as potentially disempowering concepts that were either intentionally or unintentionally incorporated in the program.

7. Findings and Implications

With this more complete picture and meaning of empowerment for the QSIC program design, we turned to consider the seven concepts that emerged from the unallocated and negative points and to draw inferences for youth enterprise programs.

First, the unaccounted positive points relating to *Self-Confidence* and *Inspiration* were easily attributable to the design of the program despite the fact that they were not explicit aims. *Self-Confidence* was promoted through the challenging aspect of the design, which was

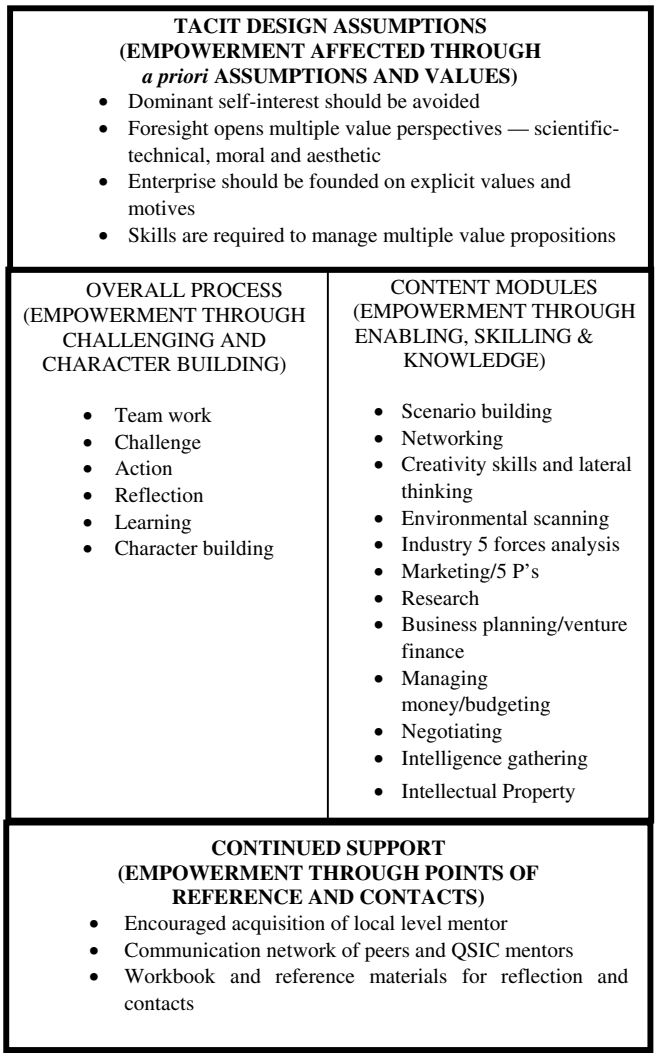

Fig. 2. Reflexive summary QSIC empowerment influences.

always aimed at being achievable, through peer group and program support. Nonetheless, the tasks were not made easy, which brings about a point of balance in such a program; set the challenges too high and the designers risk damaging the confidence of the participants, too low and the participants would not experience the sense of achievement that is important for empowerment. Conger and Kanungo (1988) raised these issues in their discussion of the organizational setting in a review of theory and noted that enactive attainment — achieving and succeeding through actual experience — would likely be one of the most effective means of improving employees' self-efficacy. The QSIC program was designed for participant enactive achievement; however, in a mixed age and ability program such as the QSIC, the

risk was ever present of damaging the self confidence of some participants as they struggled with concepts due to an under-developed level of mental agility.

In the QSIC program, this was largely countered through the support and group process. Even so, the comment from one participant that said "[T]he lectures about taking your idea to reality were too advanced for people, which was a little discouraging 'cos they then think it is so big and hard" was associated with a negative comment coded *Advanced Materials*. It is then apparent that we were not able to fully ameliorate this aspect, although it should be noted that the comment was made by a participant that also stated "as I have started a small business myself and I used the notes on helping me to work out my break even point," suggests that despite being difficult, it was still accessible and useful. This highlights the critical role of support and balance within the program design when integrating challenge into a program through *Advanced Materials* and also suggests that even though participants may find it hard, they can and do actually learn.

The concept of *Inspiration* was an implicit aim of the program that was not well-designed into the education component, although the structural influence provided by QSM is likely to have been responsible. *Inspiration* occurred mostly through the involvement of the mentors as evidenced by the comment "[B]eing in a room with people who had actually achieved their dream was very inspiring." Here, it appears that empowerment is achieved at the process level where the participants can visualize success through the eyes of those who have already achieved. This highlights the importance of story and narrative in the transmission of experience. Each mentor came to the program with a particular *story* about the successes and challenges faced as an entrepreneur. In terms of inspiring the participants, techniques and business content would seem to be a poor substitute for such first hand storytelling and human bonds. In fact, different participants were attracted to different mentors and this demonstrates how a diversity of mentor stories helped to engage and energize the imaginations of the participants. This is an important part of cognition, where the participant begins to think through models that would achieve the enterprise goal. However, it does not follow necessarily that transference occurs, whereby the individual believes or holds the attitude that they themselves can achieve. Combining cognition and attitude was achieved through the *Action* part of the program, where the participant experienced the process of enterprise achievement — working through the enterprise model to increase positive attitudes.

Two of the negative accounts of empowerment, *Practical Application* and *Advanced Materials*, were designed into the program and clearly, there was some sort of deficiency. This is thought to be partly due to the disparity in age and abilities and partly due to the attitudes of the participants as they entered the QSIC. For instance, the *Practical Application* point also received positive comments such as "A lot of it was relevant, especially when you went home to use it." On a fuller analysis, the participants expressing the particular negative comments on *Practical Application* were also critical of the group process and were attached to another negative code *Preference to Ones' Own Ideas*. This suggests that setting the expectations of individuals and screening for congruent attitudes and motivations with the program are also important points toward delivering empowerment through a QSIC type process. If a participant arrives with the wrong expectation, and consequently does not adjust or adapt, the efficacy of the program for that particular individual will be less.

The remaining points of negative account were not within the confines of the QSIC empowerment design. *School* and *Parental Demands* are both systems beyond the reach of the QSIC. Here then, the role of macrosystemic systems referred to by Laveman (2000) play a part and intervene with any empowerment that may be established within an external education intervention.

Our findings revealed that the planning, design and implementation of the QSIC did not originate from a thoroughly researched definition of empowerment. Various tacit definitions and interpretations of empowerment were present throughout. Empowerment in this context emerged as a complex interlocking set of processes and factors, as represented by Figure 1, and was not reducible to a single pathway of causality. We found issues embedded in the entry and expectations of participants that hampered empowerment that may be similar to issues raised in the organizational literature on the disempowering effect of employee role ambiguity (Honold, 1997). We also encountered elements within the process and outcome factors affecting agency that were consistent with our earlier literature review.

8. Toward an Empowerment Framework

This concluding section aims to outline each of the dimensions of empowerment that emerged through the analysis of the QSIC intervention; show how empowerment can be a legitimate aim of such an educational intervention; and discuss certain guideposts in entry, process and agency conditions portrayed through a theoretical framework that can be used by others wanting to develop similar educational interventions.

8.1. *Entry and process conditions*

The first points of consideration might be that of the individual level and human capacities. It seems that programs may focus on developing particular types of human capacity — for instance skills and knowledge — and neglect other aspects of human dimensions that are central to empowerment. Through our analysis, we have encountered three types of human conditions (skills and knowledge, attitudes and motivation, and cognition) that were integral to the empowerment process and possibly have inferences for entry into a program. These also seem to relate to and aid the progression through the first three psychological changes proffered by Hicks (2002). Furthermore, there appears to be some links to the different levels of learning, as portrayed by Burgoyne and Hodgson (1983), and these will be discussed.

8.1.1. *Skills and knowledge*

The teaching of concrete skills that allow participants to express forms of agency can be seen as one pathway toward empowerment. As helplessness has been correlated with hopelessness (Gidley, 2001), we might also say that empowerment may be linked with enabling "agency" or the capacity for youth to be able to help themselves and others. In this sense, the skills and knowledge enables healthy agency among participants — a primary enabling of creative capacity to act upon and shape their future, although the teaching of concrete skills may be necessary, but not sufficient, for empowerment. Learning contained at

this level seems to reflect level one learning (Burgoyne and Hodgson, 1983) that is factually significant for an immediate task but of no consequence or effect on views of the world in general.

On entry to a program, a requisite level of skills (but not necessarily the same skills) that is equally distributed amongst the group is perhaps ideal in order for each participant to feel the capacity for positive contribution. Inequity in this regard may see some participants becoming disenfranchised or isolated, producing a situation of disempowerment. We feel the broad range of ages in the QSIC produced evidence of this.

8.1.2. *Attitudes and motivation*

Following on from the discussion on skills and knowledge, a distinction might also be made between "doing" and "being." "Doing" can be thought of as skill-based, instrumental learning, while "being" is character-based, associated with attitudes and inner motivations. Attitude has been described as a *predisposition* toward certain behaviors (Athayde, 2003). We see empowerment as both engendering enhanced doing and being, with character-building equally as important as skill-building. Other dualities have also been recognized in learning and especially when learning is experientially-based. For instance, Politis (2005) draws attention to the distinctions between the duality of experiences and the knowledge acquired through experience as espoused by Rueber and Fischer along with the duality of Kolb's (1984) acquisition and transformation dimensions of learning. Cope and Watts (2000) also indicate cognizance of layers and duality in learning when they remark on Burgoyne and Hodgson's (1983) fundamental meta-level learning that suggests a gradual erosion of deep concepts that create new frames of reference. However, in our conception of learning for "being" we do not necessarily refer to the learning about an external *something*, but a more *inward* directed learning about self-belief and relationship with the world. This seems to be aligned with one process of a type-two learning experience articulated by Burgoyne and Hodgson (1983), that of a change in orientation or attitude.

The challenging experiences presented by the program at the individual and group levels necessitated dynamic responses from participants to build practical skills and, just as importantly, build character such as self-confidence, foresight, and curiosity. Thus, while empowerment is based on the ability to do, it also seems to incorporate an attitude and disposition toward the world. Ability means little if an individual is filled with a sense of hopelessness and futility. And equally, a lack of ability may be a relatively small obstacle for the person filled with hopefulness, a "can-do" attitude, and who is ready and eager to exercise their agency in the world. Skills and knowledge "abilities" in the latter circumstance may then become enabling devices to enact empowerment.

The QSIC case also raised issues about attitudes upon entry into a program and suggested that it may be a central ingredient to achieving empowerment through a program. Attitudes are shaped by expectations and if there is a mismatch between the expectations of the participant and the goals of the program, then an attitude of disdain or dissatisfaction will hamper the progress of the participant toward empowerment. Essentially, participants would be on a journey they did not wish to be on.

8.1.3. *Cognition*

According to Ester (cited in Mitchell *et al.*, 2002b), cognition refers to the way people think, perceive and know the world. The QSIC presented a dual exploration of probable futures and preferred futures, which together was designed to create a dynamic tension in the explorer to act, a dynamic hypothesized by Hayward (2003). To be an entrepreneur, one must move from the perception of being a receptor of opportunity (despite perhaps being complete with good skills and positive attitudes), to the viewpoint of being a creative mind and a protagonist for positive change. Entrepreneurial cognition is about *creating* new products and services, assembling resources and not only starting but also growing new businesses (Mitchell *et al.*, 2002b). A key element in the process of empowerment is for an innovator to perceive the world as a place where he or she can be a responsible actor and create innovations that serve a greater purpose. Being cognitively empowered without skills, knowledge and attitudes leaves the formulae for empowerment somewhat short. However, building cognition through foresight processes in conjunction with innovation and enterprise skills and attitudes suggest a pathway to Burgoyne and Hodgson's (1983) level three learning. They suggest this learning level is not situation specific but represents consciousness about conceptions of the world, how they are formed and how they might be changed.

Admission into a program may be based upon cognition-driven criteria. For example, the QSIC invites applicants to detail an invention representing the way the applicant perceives and thinks about problems to adapt and develop solutions. However, we believe the QSIC case shows that cognition alone is insufficient as a selection criterion when empowerment is the goal — equally important are sufficiency of skills and knowledge relative to the group as well as attitudes and motivations that are congruent with the aim of the program.

8.2. *Process and channels for agency*

Literature, particularly that of Gidley (2001, 2004) and Hicks (2002), backs up our own assumptions, as well as the initial course design, regarding the importance of avenues for action and agency in the process of empowerment. Without such avenues for action, there is a danger that the energy and vision of young participants will lack direction and lead to a sense of disempowerment or futility through unfulfilled expectations. Empowerment within this context requires a re-distribution of power, resources and decision-making responsibilities (Staples, 1999) and often, this will challenge or test the will of reigning authority. In addition, there are different types of agency that may vary depending on the needs of the participants. The process of creating value should be seen as diverse, filled with nuances and shades of meaning. Value can be created across *value spheres* (Wilber, 2000), scientific-technological, moral-ethical and aesthetic. Different enterprises will have different modes of organization depending upon their appropriateness to the situation. To unnecessarily limit options for agency would seem to be detrimental to the goal of empowerment, an unnecessary cutting off of the potential for human creativity and development. The following points expand on different contexts within which empowerment can be supported or stifled.

8.2.1. *Organizational boundaries*

The organizational boundaries refer to the structure and authority within the organization of the intervention itself. The program intervention can be considered as a practice field, a place of rehearsal for the young participants and here, they must feel the sense of responsibility and consequence of actions for which they have been responsible. It is incumbent upon the organizers and deliverers of the program to progressively roll-out empowerment and assist the participants to see consequences and alternative ways of being. The hypothesis is that the less empowered the participants are within the program, the less effective will be the transference of responsibility beyond the program.

An example of this can be cited from the QSIC experience whereby the participants were requested to form teams under their own volition. The result was three teams, one of which was populated entirely by females and the other two entirely by males. The natural instinct of the QSIC organizers was to intervene and re-form the groups and create gender balance. As program facilitators, we argued against this and suggested that it was the participants' decision and in essence *their* convention to which they had the right to create the teams they wanted. We did, however, point out the folly of uniformity to the groups and gave them the right to re-form as they saw fit. In the end they did not change and we allowed them to keep the responsibility for that decision. We feel this was an important part of empowering the group to which some positive results may well be partly attributed.

These sorts of tensions in adult decisions for youth empowerment programs are also raised in research by Messias, Fore and Parra-Medina (2005), who have developed best practice guidelines for adults involved in youth empowerment programs. Of course, some rules and boundaries need to be installed in the interests and protection of the participants and the organizers in order to mediate against a breakdown in meaningful organization. However, keeping these boundaries clear and relevant to the task of youth empowerment is thought to be good practice for an enterprise program.

8.2.2. *Family and social boundaries*

Another process aspect for youth empowerment is an integration of family and social boundaries. Evidence was clear that both family and school (a social construction with particular boundaries) were responsible for halting the progress of empowerment. There may be limiting factors, such as family traditions and what family thinks is possible, versus the more unbounded and opportunity space and notions of possibility created within the QSIC. Whereas participants were encouraged to return home and continue with bold visions for what they were to create, some experienced the constraints of school, family expectations, and to an extent, legal disempowerment. The QSIC placed expectations upon participants with regard to what was possible in the area of enterprise and social change, and generated motivation toward this. Yet, many of these expectations can only be realized where individuals have legal entitlements as adults, have transcended limiting factors in their social and familial situations, and have shifted from the dependence mindset characteristic of adolescents to the independence or interdependence mindsets characteristic of most adults. This type of educational intervention, therefore, may be more appropriate as a "rite of passage," which

marks the transition between stages in life. Such a rite of passage may serve a symbolic purpose as well as a practical one. At the symbolic level, it sends the message to participants that they have power in shaping the world and to use this power for good. At the practical level, it enables participants with skills and knowledge that they can quickly implement in their lives.

In the earlier discussion on empowerment in enterprise programs, Atherton (2004) implicated the broader responsibilities of enterprise programs in considering the structural enabling and disabling conditions in broader society. An example of incongruence between these dimensions relevant to the issues of social boundaries was encountered in the QSIC program. In Australian law, a minor (those under the age of eighteen years) has diminished capacity to enter into contracts. While case law has found that the minor is relatively protected, it is the party that enters into a contract with a minor that is exposed to the full risks of any failure on the minor's behalf to deliver or uphold the conditions of the contract. This on its own does not prohibit a minor from starting a business, although it does limit the extent to which the business can be taken seriously without the full support of an adult (someone above eighteen years of age) to act in the legal capacity required to form a fully enforceable contract. This nuance of law is a difficult concept to convey to a group of eager young adolescents, but is important to understand for the protection of both the rights of the young participant and the general community. The gravity of the situation becomes clear when one considers such issues as intellectual property protection for minors. This scenario portrays the case of a mismatch between the aims of a program and the social legal boundaries, and with increased awareness of these issues, the QSIC program has been amended and adapted to more appropriately reflect the social boundaries within which it operates.

8.3. *Agency outcomes*

Empowerment should be viewed as a multi-level process (Seibert, Silver and Randolph, 2004) as well as an outcome of agency or the ability to act. It appears essential that cognizance of the types of agency outcomes are considered within the intervention design in order to avoid disempowering, disabling or destructive consequences beyond the program boundaries. There seem to be three potential agency outcomes of an enterprise program that need to be considered.

First is one of *Social empowerment* and in this case, the individual may not seek independence but rather a re-construction of existing social norms and expectations. This was reflected significantly in the foresight literature (Gidley, 2001; Gidley and Inayatullah, 2002; Hicks, 2002). The individual in this circumstance will develop an enterprise that can positively influence the social structure in a consensual manner and may be considered less rebellious but perhaps rather radical and assertive. The social circumstance considers it the right or personal responsibility of the individual to voice their opinion and act in concert with their beliefs.

Second, there is *Organizational empowerment* whereby the participant enacts empowerment within a specific organizational, group, team or structured context, and this was represented largely in the innovation literature (Dooley and Sullivan, 2001; Sundbo, 1999).

The individual is granted rights and authority to act in a prescribed manner and empowerment is a construct of the particular social-organizational context.

The third outcome is a *Self-enabled empowerment*, which is a construct of the individual, encountered most strongly in the entrepreneurship literature (Kantor, 2002; Johnson, 1998; Martin and Wright, 2005). Characteristics of this empowerment may be seen as rebelliousness or an individual seeking to exert their own will and direction in a *tear-away* fashion from an existing social structure. The goals and desires of the individual may lie outside of those of the system within which they find themselves. This form of empowerment is highly dominated by leadership ambitions whereby the individual will seek independence of the boundaries of family or other socially constructed boundaries to take rights and responsibilities upon themselves.

For an educational intervention such as the QSIC, each form of empowerment is a possible aim; however, the actual lived outcomes may not be in concert with the intended outcomes of the program. This raises an important issue for the development and design of the program and the level of engagement of the program organizers with the social systems that will be encountered by the participant upon their return. Therefore, designers of an empowerment program have a responsibility for engaging with the issues of both the participant and the social context from which the participant emerges in order to establish shared beliefs and ensure that the intended outcomes are in harmony with the social and organizational environments to which the participant will return.

Figure 3 provides a graphic representation of a proposed theoretical framework of the factors and outcomes affecting individual empowerment and agency. It maps the influences that we have encountered in the exploration of the QSIC case and we hope provides insight into theoretical relationships that can be subjected to further testing and development.

9. Conclusions

In pursuing empowerment as a goal through an enterprise-oriented education, an important distinction needs to be made between the overall approach and the discrete techniques in the modules of delivery. Without this distinction, it is easy to focus on the modular aspect of the program and an assumption that empowerment will take place in a rather disaggregated manner. An understanding of the overall program, the approach, is necessary to situate the various techniques. In the QSIC, the approach was to challenge participants in a deep and appropriate way, informed by an understanding of action learning (team project and experientially-based learning by doing) and *outward bound* (a bold adventure and rugged journey). The individual techniques were nested in this broader approach, which assisted empowerment.

Beneath this dynamic approach, empowerment was evidenced beyond the boundaries of the program except where other contextual issues obstructed the process. External systemic pressures had a disempowering and stifling effect on the success of the intervention within at least the time frame of the QSIC evaluation. Rather than just download pre-packaged content into the minds of participants, the expectation from the QSIC was that participants would

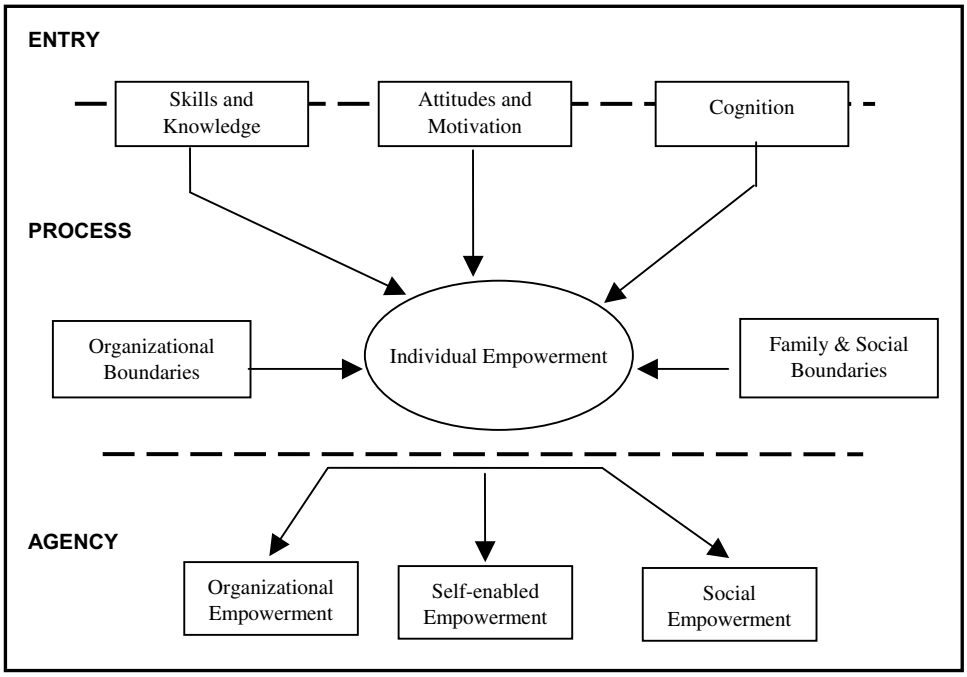

Fig. 3. An entrepreneurship empowerment intervention theoretical Framework.

work with the content as material and tools in their usual environment to build something close to *their* hearts. From this view, empowerment cannot so easily be instrumentalized.

Empowerment should not be understood as a construct with a single source of derivation, but as a dynamic process and quality that can be directed toward the development of certain human capabilities and attitudes. It may also be understood in humanistic terms, as the unfolding of the human potential. And it may also be considered as a feeling, an outlook, a human characteristic; empowerment is more than skill. It can be a sense of accomplishment that translates to confidence and also a deepened context that leads to initiative and responsibility taking. Enabling was considered an important approach to empowerment — to give ability in key areas. However, engendering an empowered attitude and fostering self-confidence was also important.

10. Limitations and Further Research

Limitations in this research endeavor need to be noted, especially as the framework has been developed through the experiences of one particular case intervention with a limited number of participants. This has meant that the basis of the data extraction has been narrow with a weak heuristic and the resulting framework would benefit from testing with a broader range of participants before it could be generalized across cases. The method draws upon the assumptions and values of the primary researchers and interventionists from which the

qualitative evaluation was conducted (noted in Figure 2) and was aimed at construction of theory. This suggests the need for a wider investigation involving comparative analysis of educational interventions.

The research method has kept the voice of the participant passive. The findings would have benefited from testing and verification with the participants and perhaps this could be achieved in the future by engaging the participants in participatory approaches to research to develop and extend the conference design. This also suggests the need for longitudinal research that maps the circumstances of individuals against the pressures on empowerment with a closer examination of the role of social context (family/school) as both limiting and enabling participant agency in innovation and enterprise activities. There also may be subtle boundary limitations within specific contexts not yet identified and indeed, boundaries are likely to overlap between social, family and other potentially unidentified structures.

A fuller understanding of the development of an intervention and the different types of possible participants in empowerment interventions is still required. For instance, what approach and design would be appropriate for an FI and E empowerment intervention developed for convicted criminals in preparation for release from jail or for employees in a global business or students through a post-graduate education program? Each of these interventions would have very different participants with starting positions of a vastly different nature and therefore, would it not lead to variations in design principles? Each of these type of participants would also have different perspectives on structures within which empowerment would need to operate. This suggests a focused study on the link between structures (which emerge in futures explorations and innovation) and agency (which emerge in entrepreneurship) — a problematic relationship that has been well-developed for example by Giddens (1984). Where many education interventions for youth seek to focus on an employability outcome, an entrepreneurship education intervention has a far greater need to be interfaced into the greater social spectrum. Holding a principle aim of empowerment brings with it broader responsibilities and potentials. As researchers and academics, we have an imperative to ensure that rigorous theoretical frameworks underpin entrepreneurship education and training for human empowerment in bringing diverse value into the world.

Appendix A. The Third Party Evaluator Questions that Revealed Responses Indicating Levels of Empowerment (Questacon Smart Moves Report, 2004, unpublished)

- Usefulness of the mentors
- Overall, what do you believe was the strongest/best part of the program?
- Overall, what was the most memorable part of the convention?
- So what have you been up to since the convention?
- What information that you learned at the convention, have you used?
- What steps (if any) have you taken to further your idea?
- Do you have any major achievements/milestones you would like to tell us about that has happened for you and your idea since the convention?
- What are your future plans/steps for you and your idea?

- What has been the biggest challenge faced by you since the convention for you and your idea? Have you overcome it yet?
- Suggestions for improvements to the information that you received before the convention

Appendix B. First Person Reflection Summary

The four reflexive questions posed for the first person action research:

(1) What did empowerment mean in the context of foresight, innovation and enterprise? In particular, what about the distinction between official/formal knowledge and lived experience.
(2) What role did learning processes have in delivering empowerment?
(3) How did our values/positions and assumptions around multiple value propositions influence the process of empowering and the outcome of empowerment?
(4) What needs did we anticipate in terms of supporting empowerment beyond the conference for the participants?

Summary of Reflexive Questions Combined Response

Content: What did we want them to learn?

(1) Deliver technical know-how or an ability to apply practical skills sets
(2) Relay the importance of contextual and relational understanding
(3) Be aware of issues and challenges of society
(4) To build hopeful and empowering visions
(5) Learn about "team" perspective of innovation
(6) Linkage of the three domains of foresight, innovation and enterprise
(7) An awareness of the consequences of consequences
(8) Assessment of ideas for social and economic impact at community and personal levels
(9) Open-mindedness about different scenarios and perspectives
(10) Awareness and respect for their own experiences
(11) How to draw upon the experiences of others

Process: How did we think processes contributed to learning?

(1) The process was essential to the delegates gaining empowerment
(2) Certain settings can be disempowering
(3) The process needed to provide points of reference through stories of life
(4) The process needed to provide the participants some control
(5) Some self-directedness was important to enable individuals to find what was important and meaningful
(6) Teamwork was important
(7) Through gaining confidence in the "formal knowledge" in that the process proved the ability to apply the technical knowledge
(8) Through gaining self-confidence in beliefs

(9) Through gaining resilience to challenges of beliefs
(10) Through gaining flexibility to re-assess beliefs

Values: What affect did our preconceived values and positions on multiple value propositions have on the process and the empowerment outcome?
We believed that:

(1) All "value spheres" should be considered — scientific-technological, moral and aesthetic
(2) Values and motives should be explicit
(3) Self-interest dominates the business culture that drives change today and this has a negative social impact
(4) Foresight opens up the various value dimensions in a changing world
(5) Multiple value propositions are a given and innovation and enterprising individuals need to know how to work within that context

Support: What support beyond the conference did we feel necessary for empowered individuals?

(1) Support at the local level by a mentor to keep the conversation and peer group alive
(2) Support was an aid or a tool to be utilized that included a means to remain in contact with peers and mentors
(3) A reference source such as the workbook to assist with sourcing information and locating assistance
(4) A prompt for reflective thinking provided by the workbook

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